

### ✦ GY3Z-R60 IS A READY-TO-PRESS POWDER ENABLING THE MANUFACTURING OF HIGH PERFORMANCE ZIRCONIA PARTS

GY3Z-R60 grade is made of 3 mol% yttria-stabilized zirconia ready-to-press granules produced by spray-drying of CY3Z-RA powder with 3wt% binders.

The high purity of GY3Z-R60 combined with its fine particle size distribution allow the manufacturing of zirconia part with high mechanical performance.

Thanks to its advanced binder system, GY3Z-R60 is an easy-to-press grade suitable for both uniaxial pressing and cold isostatic pressing (CIP).

#### 🔍 GRANULES PHYSICAL PROPERTIES

	Particle size <sup>a</sup> (µm)		Loose bulk density (g/cm <sup>3</sup> )	Flow ability (g/s) <sup>b</sup>
	D50	D90		
GY3Z-R60	60	<120	1.3	>0.85

<sup>a</sup> : Laser diffraction - <sup>b</sup> : Hall cup

#### ⚙️ MAIN APPLICATIONS

- Technical ceramics: plungers, valves, bearings, wear resistant part, biomedical
- Dental standard grades



Structural ceramic parts



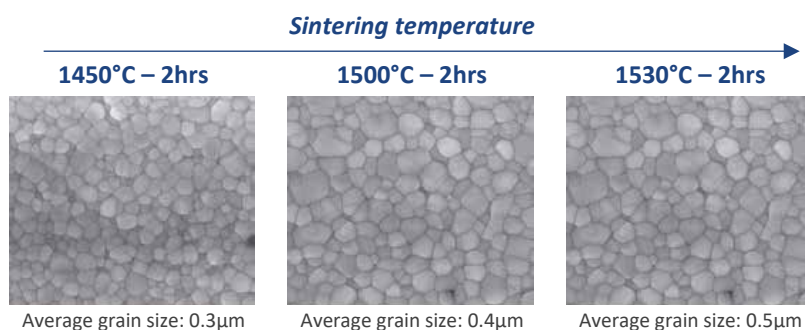
Dental standard grades

#### 🔬 CHEMICAL & PHYSICAL ANALYSIS

	Chemistry (wt%) <sup>a</sup>						L.O.I. <sup>b</sup> (wt%)	SSA <sup>c</sup> (m <sup>2</sup> /g)
	Y <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Na <sub>2</sub> O	TiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>		
GY3Z-R60	5.40 ±0.20	0.25 ±0.05	<0.02	<0.02	<0.005	<0.005	2.5-3.5	6.0-8.0

<sup>a</sup> : I.C.P. - <sup>b</sup> : Loss weight from 20°C to 1000°C - <sup>c</sup> : B.E.T. measurement

#### 🔍 ZIRCONIA PARTS BASED ON GY3Z-R60 EXHIBIT A FINE AND NARROW GRAIN SIZE DISTRIBUTION



#### 📦 PACKAGING

- 20kg plastic pail

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